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WOMEN WORKERS IN FACTORIES

BY ANNETTE MANN
Executive Secretary:
THE CONSUMERS' LEAGUE OF CINCINNATI

PUBLISHED BY
THE CONSUMERS' LEAGUE OF CINCINNATI
AUGUST, 1918

WOMEN WORKERS IN FACTORIES

A STUDY OF WORKING CONDITIONS IN 275 INDUSTRIAL ESTABLISHMENTS IN CINCINNATI AND ADJOINING TOWNS

BY ANNETTE MANN

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THE CONSUMERS' LEAGUE OF CINCINNATI

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FOREWORD.

Through the investigation of violations of the Labor Laws, the Consumers' League was brought into contact with working conditions in Cincinnati factories. From these casual visits it became apparent that there was need for a systematic study of industrial establishments. To make such a study possible and to give it a semi-official character, the Industrial Commission of Ohio, was asked to furnish credentials to investigators of the League which would enable them to enter factories for the purpose of inspection. In accordance with a provision of the Act creating the Commission, (Sec. 871-35 O. G. C.) giving it the power to appoint a competent person who is a resident of the State as agent for the purpose of making any investigations, the Industrial Commission appointed in November, 1916, three members of the League as an advisory board and gave them the necessary credentials. A study of a large number of establishments was thus made possible.

The Consumers' League takes this opportunity to publicly acknowledge its indebtedness to the Industrial Commission of Ohio, and to Mr. T. F. Kearns, Chief Deputy of the Division of Workshops, Factories and Public Buildings, for the hearty co-operation and support extended it at all times during the progress of this study.

SEELEY K. TOMPKINS,

President.

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I.

SCOPE AND METHOD OF INVESTIGATION

The purpose of this study was to ascertain working conditions in factories and workshops employing women and girls. With this in view a general and welfare investigation was made of 275 establishments, representing 28 distinct industries, employing a total of 40,651 wage earners, 16,924 of whom were women and girls. The investigation extended over a period of 13 months, from April, 1917, to May, 1918. It concerned itself chiefly with the physical welfare of female employes. In most establishments, however, male employes are subject to the same conditions, except in the matter of sanitary conveniences and hours.

The study was not confined to any definite area nor were any special industries selected, except those studied for special processes. A 100% investigation was made of all the industries represented by not more than ten plants in this locality. In the larger industries it was not attempted to visit all local establishments, but merely to see as many in each as were necessary to form a fair judgment of the charateristics of the industry.*

A study of Home Workshops in the clothing trade was conducted simultaneously with the factory investigation. The results of this study are included in Part VI of this report.

CONDITIONS INVESTIGATED

In the *general* investigation, special attention was given the following subjects: Location and construction; fire protection; condition of workrooms, halls and stairways; toilet accommodations; dressing rooms; washing facilities; lunch rooms; hours of labor; posture at work.

The *welfare* investigation covered the following: First-aid facilities; hospital rooms; rest rooms or couches in dressing rooms; rest periods; kind of drinking water; electric fans; employes organizations; vacations with pay; pay for legal holidays; pension and insurance features; bonus, premium and profit sharing plans. The question of wages was not entered into, as this would have required a study of pay rolls for which there was neither time nor sufficient authority. The minimum initial wage for women was reported, however, for establishments in which the day or time work system predominates, or both the time and piece work systems are in force.

*For the kind of industries included in this investigation and the number of plants in each see Table VII Appendix.

No attempt was made to study light, illumination or ventilation as adequate consideration could not be given these subjects without special training. The safeguarding of machinery was studied only in the new women-employing industries and in the industries selected for the study of special processes.

To determine working conditions in the establishments visited, each was graded on the subjects covered in the *general* investigation. The grades A, B, C, D, are used in this report to indicate the degree of cleanliness, adequacy of equipment, or general conditions, according to the text. The factors which determined the grading of the various topics considered will be explained under their respective heads. Table I shows conditions in the 275 plants investigated.

TABLE I.

SHOWING THE PHYSICAL CONDITION IN 275 INDUSTRIAL ESTABLISHMENTS INVESTIGATED

Grade	No. Plants	Per Cent
A—good	42	15.26%
B—fair	141	51.28%
C—bad	79	28.73%
D—very bad	13	4.73%
Total	275	100.00%

II.

GENERAL CONDITIONS

LOCATION AND CONSTRUCTION

There are two classes of establishments, those located in loft buildings and those located in special factory buildings. Of the 275 factories visited, 139 are in loft buildings and 136 in special factory buildings. In

the loft buildings are housed chiefly establishments in the needle trades, also a few printing shops. The special buildings house larger factories requiring more floor space. The physical conditions in loft buildings are good, as most of them are fairly modern structures. The worst features of loft shops are the toilet accommodations, which are very poor in several of the loft buildings.

Five of the 275 plants are of frame construction. These are small establishments employing comparatively few workers. The remaining 270 are either brick or concrete structures, 90 being fireproof and 40 semi-fire-proof, of the type known as mill construction.

FIRE PROTECTION

In grading for fire protection consideration was given to (a) construction and height of building; (b) nature of material handled in process of manufacture; (c) kind of stairways and exits; (d) automatic sprinklers and fire extinguishing devices; (e) overcrowding of workrooms; (f) passenger elevators; (g) compliance with requirements of the State law (Sec. 1028-1 App.)

By far the best conditions are found in establishments in the fireproof buildings, included those housed in loft buildings, although in the latter there are some instances of overcrowded workrooms. The worst conditions exist in buildings converted to factory use in the older sections of the city. Among these are several plants 3 and 4 stories high which had no fire escapes when first visited in this investigation, but on which escapes have since been built. There are also a few that have very old, rusty fire escapes, one of the ladder type. Violations of the law, however, are found in some of the very best buildings. In a number of factories the windows leading to the fire escape are more than 2 feet above the floor, the maximum set by the Ohio State Building Code, and no steps are provided to reach these. Instances of blocked exits are numerous. In one large plant the investigator found a heap of rubbish before one of the exits and in another there was a row of refuse cans in front of an exit. Windows are frequently locked and exits otherwise obstructed. The most common violation is the temporary blocking of exits by packing cases and loaded trucks. In some plants with limited floor space, machinery is placed too close to exits to permit of easy access. The legal requirements for marking exits and providing doors that open outward are complied with in very few establishments. Marked exits are the exception rather than the rule. Fire drills are practiced regularly in only two plants. Several employers stated that they would gladly introduce fire drills if they knew what kind of drills were suitable. Very few establishments provide passenger elevators.

The grades A, B, C, D, are used to designate the kind of fire protection provided by the concerns visited. There are a number of plants which are but two stories high and do not require any special fire protection. Table 11 shows the grading on fire protection given the plants investigated.

TABLE II.

SHOWING KIND OF FIRE PROTECTION FOUND IN 275 ESTABLISHMENTS INVESTIGATED

Grade	No. Plants	Per Cent
A—good	87	31.64%
B—fairly good	81	29.46%
C—poor	64	23.27%
D—very poor	12	4.36%
None needed	31	11.27%
Total	275	100.00%

CONDITION OF WORKROOMS, HALLS AND STAIRWAYS

In the average industrial plant the workroom is a much neglected place. If the nature of the industry is such that it can be kept fairly clean without too much effort, well and good. But if the work is dirty little attempt is made to keep the premises clean. Walls and ceilings are almost never cleaned and factory windows are rarely washed. Clean windows were a cause for special comment on the schedule blanks. Poorly lighted workrooms in many instances are made darker by a thick coating of dirt on the window panes. Floors are as a rule swept daily but they are rarely scrubbed. There are a number of establishments, however, especially those in the outlying districts, which are an exception to the rule. In these floors are clean, windows are washed regularly, walls and ceilings, usually painted in light colors, are kept in good condition. In some window boxes decorate the workrooms. But it was evident throughout this investigation that in most factories little thought is given to the care of workrooms. And this notwithstanding the fact that both the health and efficiency of employes are determined to a great extent by their environment. Girls are especially susceptible to their surroundings and frequently complain of the dinginess in which they are compelled to spend the greater part of their waking hours.

In 37 establishments work rooms are crowded with machinery and workroom floors littered with material. In 9 outer garments hang in workrooms. Sixteen concerns have dark or semi-dark workrooms which are artificially lighted in daytime. Windows are improperly shaded in many plants, some among the best in the city. In a few old newspapers and rags are hung on the windows to keep out the glare of the sun. Employes frequently work at machines facing a strong light instead of having the

light fall over their shoulders. Lack of floor space is sometimes given as an excuse for this but more often employers whose attention was called to this, stated that "no one had ever complained of this before."

While no attempt was made to study ventilation, close, stuffy workrooms are so common an evil that they cannot be passed by without comment. Nearly all of the establishments investigated depend upon windows only for their fresh air supply and these are generally closed in cold weather. This is inevitable as employes sitting nearest the windows object to drafts. Very few plants have mechanical means of ventilation or even ventilating devices, such as the ordinary draft boards.

In estimating the condition of workrooms, the presence of waste due to the process of manufacture and general disorder of a temporary nature have not been determining factors. The degree of cleanliness is indicated by the grades A, B, C, D, meaning respectively clean, fairly clean, dirty and very dirty. Some of the worst physical conditions obtain in the establishments in the Food Products group (Table VII App.). Among the 41 plants in this group are 15 or 18.98% of all C plants investigated and 4 or 30.75% of all D plants (Table I p. 2). The best conditions in establishments in this group are found in the bakeries and cracker factories. Of 6 plants in this division 50% have A grade workrooms, 33.33% B grade and 16.67% C grade. The worst conditions are found in the 4 meat packing plants, 25% of which have grade B, 25% grade C and 50% grade D workrooms.

Of the 495 workrooms in which women are employed in the 275 establishments investigated, 26.91% are considered grade A, 45.82% grade B, 24% grade C and 3.27% grade D.

The condition of halls and stairways, reported for 248 of the 275 establishments visited, is somewhat better than that of the workrooms. Of the total number 34.28% are graded A, 43.95% are graded B, 19.35% are graded C, and 2.42% D.

TOILET ACCOMMODATIONS

To determine the condition of toilets the following points were considered: Location; kind of plumbing; state of repairs; light; ventilation; use of disinfectants; adequacy of flush; cleanliness and general care. Five establishments have matrons in charge of toilets and washrooms. In most plants, however, the janitor or caretaker of the building looks after them. But there are a number of concerns, among them some that are fairly large, who leave the care of toilets to employes. They are supposed to clean them on Saturday afternoon or during the noon hour, which is generally a half hour. Needless to state that conditions in those plants leave much to be desired. The best conditions obtain in the 5 factories with matrons in charge.

All but one factory have inside toilets with modern, open plumbing. The one outside is of the anti-freezing type. Basement toilets are found in a few plants. In 4 the toilets open directly into workrooms. The legal requirement of 1 toilet for every 25 female employes or fraction thereof,

situated on the floor of the workrooms (Sec. 1009 App.) is complied with in all but 9 establishments. In 6 of these there are not quite enough toilets for the number of employes and in 3 they are more than one floor above or below the workrooms. Toilets are kept in good repairs and disinfectants used in most plants. But while the general condition of toilets is good, the light and ventilation is poor in a large number of establishments. In 101, among them many loft shops, they are dark or semi-dark, and in 110 they are very poorly ventilated. Some of the latter have air shafts, but many have no direct connection with the outer air. Toilet facilities for male employes are, as a rule, separate from those of female employes, being either at opposite ends of the workroom or on different floors. In only 3 factories do they adjoin. The accommodations for men were not investigated, but wherever seen they were found to be much inferior to those provided for women.

The sanitary condition of the 1163 toilet compartments inspected is shown in Table III. Table IV shows the number of plants with A, B, C, D, grade toilets.

TABLE III.

SANITARY CONDITIONS OF 1,163 TOILET COMPARTMENTS INSPECTED IN 275 PLANTS

Grade	No. Toilets	Per Cent
A—good	183	15.74%
B—fairly good	484	41.62%
C—bad	453	38.95%
D—very bad	43	3.69%
Total	1163	100.00%

TABLE IV.

ESTABLISHMENTS HAVING A, B, C, D GRADE TOILETS

Grade	No. Plants	Per Cent
A	54	19.63%
B	105	39.64%
C	101	35.64%
D	15	5.09%
Total	275	100.00%

WASHING FACILITIES AND DRESSING ROOMS

The Ohio labor law requires that lavatories and dressing rooms for female employes should be situated together, on the same floor as the workrooms, or the floor above or below. This requirement is generally complied with. In 6 plants only are they more than one floor above or below the workrooms. To economize floor space, these plants have one large lavatory and dressing room situated on the ground floor, or in a few plants, on the top floor of the building. Where the latter is the case it necessitates much extra stair climbing for employes who work on the lower floors, as elevator service is not always provided.

Since there is no prescribed legal standard for washing facilities, the law merely requiring that "suitable" facilities should be provided, the equipment of washrooms varies with practically each establishment. The more modern factory buildings have large, well ventilated lavatories with white enameled basins, hot and cold water, and often soap and towels. The older buildings, which are in the majority, have iron troughs or sinks and where there are no washrooms these are located in the workrooms. Of the 275 establishments inspected, 31.27% supply basins, 68% troughs or sinks and .73% tin pans or buckets.

To estimate the adequacy of washing facilities a definite standard was adopted as follows: Facilities are considered *adequate* where hot water, soap and towels are provided, and where there are not more than 20 employes to each spigot or basin; *fairly adequate* where hot water only is provided or hot water and either soap or towels, and where basins or spigots are in the ratio of 1 to 20 employes; *inadequate* where only cold water is provided and where there are more than 20 employes to each spigot or basin. Judged by this standard only 8.36% of all plants inspected have adequate washing facilities, 32% have fairly adequate facilities while 59.64% have inadequate facilities. Of the latter 4.36% have an insufficient number of basins or spigots.

From the above it is evident that hot water is provided in only a small number of establishments, 40.36% in all. The law requires hot water in plants where poisonous materials are handled in the process of manufacture or where employes are exposed to poisonous fumes or dust (Sec. 6330 App). A number of factories, however, where lead enters into the composition of materials handled, such as printing shops, or where painting and varnishing forms an auxiliary feature, provide no hot water. The absence of adequate washing facilities is a decided hardship in plants where the work is dirty. Hot water can be provided at very little expense and should be required in all manufacturing establishments. The investigator was frequently told that soap is not furnished because employes take it home. This can be obviated by providing liquid soap as many plants do. In some plants roller towels are still in use. Paper towels are used to some extent but in most factories where towels are provided they are the individual linen towels. These are generally supplied free of charge. In only a few plants are employes required to pay for them.

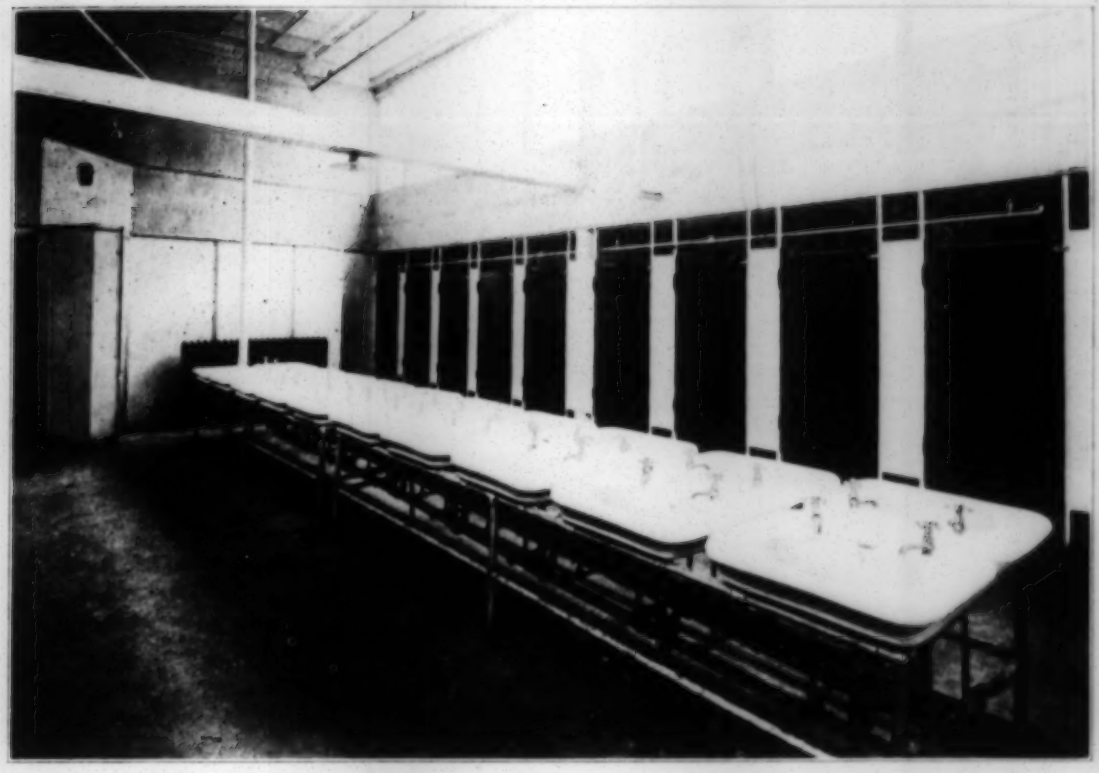
DRESSING ROOMS

In estimating the condition of dressing rooms light, ventilation, care and equipment were considered. Although a dressing room is required in every establishment where females are employed, 17 of those inspected have no dressing rooms. In some of the latter outer garments are hung on hooks in the workrooms, in others a corner of the workroom is curtained off to form a dressing room. While in a few, located in old loft buildings, employes use the public dressing room provided in the building. The majority of dressing rooms have very little equipment, usually only hooks for hanging clothes. A few have coat hangers, hat and shoe boxes. One plant, where the work is very dusty, provides clothes bags. Of the 398 dressing rooms inspected 15.27% have steel or wooden lockers and 84.73% have hooks. In the newer establishments ventilated steel lockers with the hat shelf and shoe compartment are provided. The light and ventilation in dressing rooms is considered bad in 12 plants only. Overcrowded dressing rooms are found in 4 plants. As to the care of dressing rooms, 33.17% of the 398 investigated are considered clean, 45.73% fairly clean, 19.09% dirty and 2.01% very dirty.

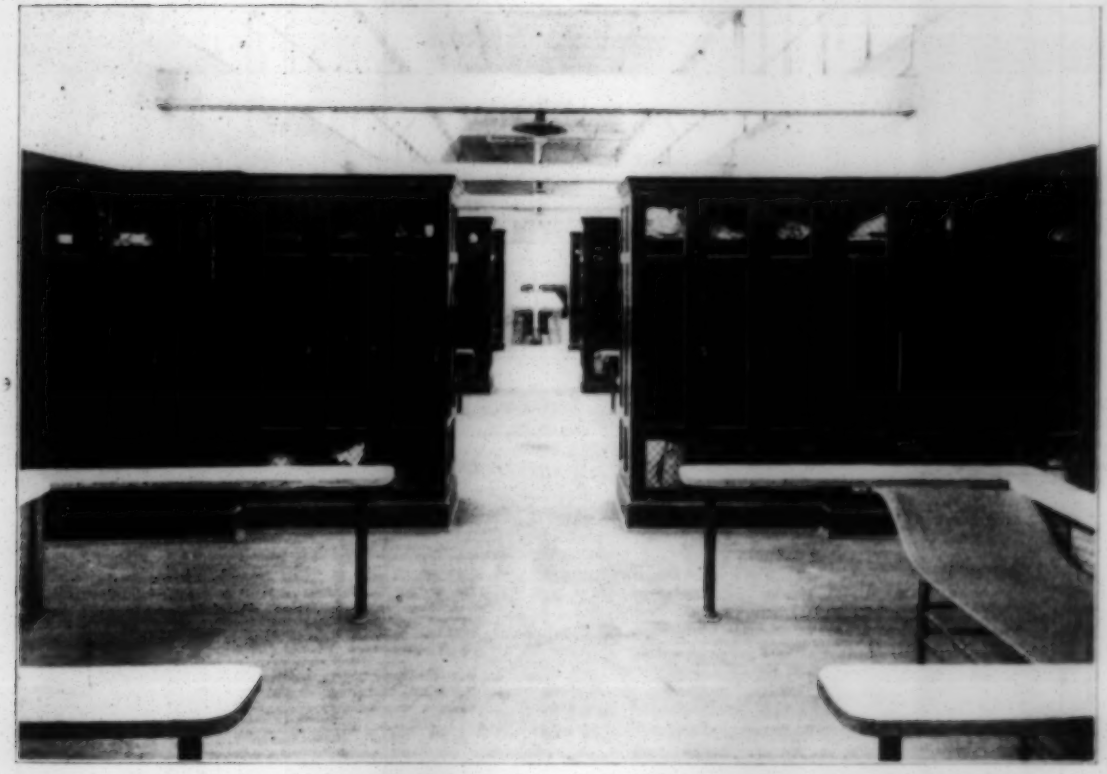
LUNCH ROOMS

A suitable lunch room, separate and apart from the workroom, is required by the labor law in establishments where less than 1 hour is allowed for the noon recess (Sec. 1008 App.). This is not generally complied with as many employers claim that employes prefer to eat in the workroom rather than in a lunch room. Because of this claim no great effort has heretofore been made to enforce this provision of the law. Many employes do prefer to eat at their machines or workbench, but where lunch rooms are provided they should be required to use them. Sometimes, however, the lunch room is in a separate building, necessitating washing up before going out to eat. This employes object to as it takes too much time. They have to hurry through their meal and rush back to work. Employes have also stated that they do not use the lunch room because it is generally overcrowded. However, plants with large, well equipped lunch rooms find no difficulty in having them used.

Of the 275 plants inspected only 24.36%, 67 in all, have lunch rooms. These vary greatly in equipment. Some concerns have very attractive rooms, light and airy, with white enameled tables, plants, and window boxes. Others have only a small space in a corner of the workroom, with a table, benches and a gas stove for heating coffee. Lunch service is found in only 27 lunch rooms, the remaining 40 supplying merely the space where employes can eat, if they so desire. In some establishments very good, wholesome meals are sold practically at cost. In others soup and coffee is sold, while in a number the lunch room concessions are rented by women who sell sandwiches, soup, milk and coffee.



WASH ROOM WITH INDIVIDUAL WHITE ENAMELED BASIN
PROCTER & GAMBLE CO.



DRESSING ROOM, WITH VENTILATED STEEL LOCKERS AND COUCH,
ADJOINING WASH ROOM, PROCTER & GAMBLE CO.

Judging from the standpoint of dollars and cents, lunch rooms with full meal service are not a paying investment. But the concerns operating them claim that they bring a high return in the form of increased efficiency in the working force. The value of a hot meal at noon is being more and more recognized by enlightened employers. Factory districts do not as a rule have any restaurants. The men go to saloons for their noon meal, but the women are compelled to eat cold lunches, which are responsible for much illness and absence from work. It is worth noting that in most of the large factories located at some distance from the city, lunch rooms are provided for the office force while no provisions are made for the factory employes.

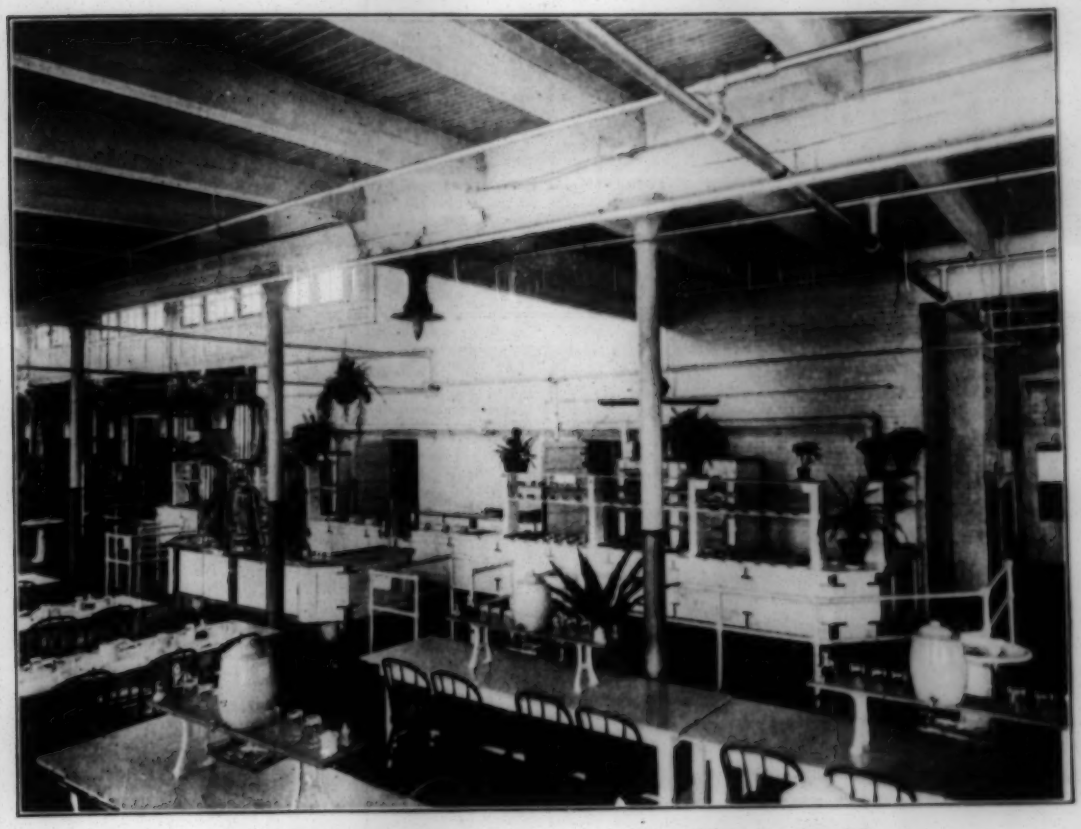
The requirement that one hour be allowed for the noon meal where there is no lunch room, is considerably violated. In 123 or 44.73% of the establishments investigated, 30 to 40 minutes are allowed for lunch and no lunch rooms provided. Employes often prefer the shorter lunch period that they may leave earlier in the afternoon. But this is only another argument for lunch rooms. Where no lunch room space is provided and where the work does not require the use of chairs and tables, employes sit on boxes while eating, on window sills and even on the floor of the workrooms. Where the work is dusty or dirty, or where injurious materials are handled, eating in the workroom is a very unhealthy practice.

Lunch rooms were graded on cleanliness, care and equipment. Of the 67 inspected 16.42% are clean and well kept, 34.33% are only fairly clean, 40.30% are dirty and 8.95% are very dirty and neglected.

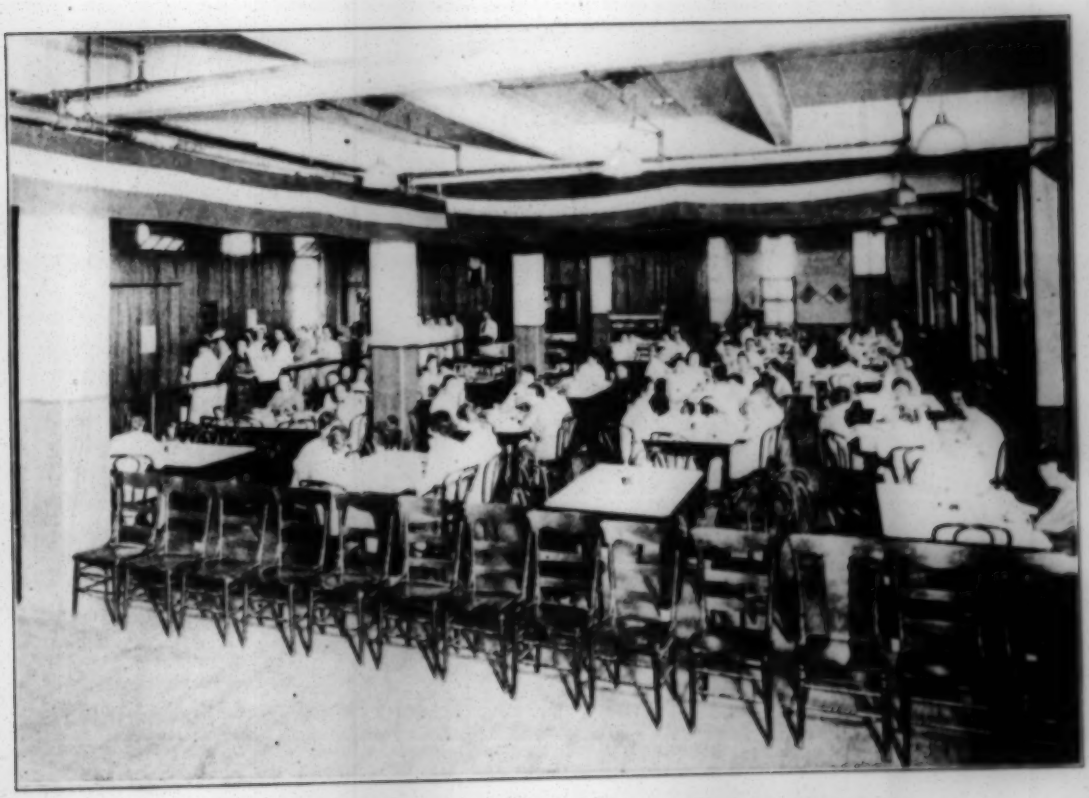
HOURS OF LABOR

In July, 1917, a new law went into effect prohibiting the employment of women for more than 9 hours in any one day or more than 50 hours in any one week (Sec. 1008 App). For many months after this law went into effect factories continued their old 54 hour schedules claiming ignorance of the law as an excuse. Violations were found in many plants after careful questioning of employes. But gradually the new schedule is being substituted. In certain industries, however, great difficulty is experienced in enforcing the law. In the majority of cigar factories there are no regular hours. Employes are nearly all piece workers and come and go as they please. Both employers and foremen state that women employes never work more than 9 hours a day and often less. But the factories are open 10 to 11 hours, there are no time clocks in many of them and there is no regular time set for the noon meal. In candy factories night shifts are frequently operated in busy season. As the law prohibits the employment of women for more than 9 hours in 24, the night shift has to be made up of women who do not work during the day. But this is not always the case. Employes of one candy factory often work on the night shift of another. In one plant *day* girls were found working on the night shift also. The foreman did not know them and did not ask any questions.

The child labor laws are frequently violated both intentionally and unintentionally. Since employers do not care to be bothered with 8 hour girls and boys (Sec. 1296 App), children applying for work usually state that



SELF-SERVE LUNCH ROOM, U. S. PLAYING CARD CO.



SELF-SERVE LUNCH ROOM, RAUH & MACK SHIRT CO.

they are above the certificate age (Sec. 12994 App). To avoid responsibility many firms have a printed form which the child fills out giving its age, name and address. Boys almost always give their ages as 16 and girls as 18. They are then permitted to work full time, that is the same number of hours as women. During this investigation children of certificate age were found working 10 hours daily under the old law and 9 hours daily under the new. Some of these children had been working for several years and were much below the legal age when they first began to work.

SATURDAY HALF HOLIDAY

The Saturday half holiday is now observed in nearly all manufacturing establishments. Before the 50 hour law went into effect many plants worked part of Saturday afternoon during the winter months. The present law, however, has reduced Saturday afternoon work to a minimum. It has also, in a few instances, helped to reduce the daily 10 hour schedule for men to 9. One large establishment, employing about 1300 wage earners, finding it inconvenient to have men working 10 hours and women 9 placed the entire force on a 9 hour schedule. This concern claims to have increased its output as a direct result of shortening the hours.

The Saturday half holiday throughout the year is observed in 90.91% of all establishments investigated. In 5.09% it is observed the greater part of the year, while in 4%, due to the nature of the industry, female employes who work all day Saturday are given time off during the week.

POSTURE AT WORK

The Ohio labor law requires seats for female employes in factories and further specifies that they should be permitted to use these seats "when the use thereof shall not . . . interfere with the proper discharge of the duties of such employes." (Sec. 1008, App.) Because of this, great leeway is permitted in complying with the provisions of this law, which results in much unnecessary standing of female employes. The law specifically prohibits the employment of girls under 21 at processes that require constant standing (Sec. 13005, App.). Nevertheless many girls under that age are found at occupations that compel them to stand 9 hours daily. To protect themselves concerns frequently advertise that they will not employ girls under 21, with the result that all girls who apply give their age as 21. In 1 factory the investigator found 6 girls whose ages ranged from 16 to 19, standing all day. Some establishments are adopting the plan of alternating jobs, which makes it possible for women employed at standing operations to do work during certain hours of the day which requires sitting.

There is reason to believe that much of the work now performed standing could be adapted to a sitting position by providing suitable seats. Many women prefer to do their work standing because seats are either too high or too low for a particular process. But where the work actually necessitates standing seats should nevertheless be at hand to be used during momentary rest pauses. Where no seats are provided women sit on boxes, on trucks and on the edges of tables, in most awkward postures, whenever an opportunity presents itself. Much unnecessary standing is doubtless due to the fact that employers never considered the evil effects of continual standing upon women. Men factory inspectors are satisfied when told that "the work requires standing" and there are not enough women inspectors to cover the field thoroughly. Employes, too, not knowing that seats can be provided to meet the needs of the work, often say that they can work better standing. One concern which has given some thought to the question of seats has various kinds on hand. From these employes may select whichever they find best suited to their needs.

Where the work permits sitting seats with backs are not always provided, and where they are provided they frequently have very stiff, straight backs, which are decidedly uncomfortable. Few of the seats found in factories have both the back and the foot rest. Of the 275 concerns visited only 229 supply seats. Of these 57.64% use seats with back supports and 42.36% use stools.

III.

WELFARE WORK

Under this head are grouped all provisions for the health and comfort of employes, not required by law, as well as any policies designed to promote efficiency. The subjects considered in the investigation are: first aid facilities; rest rooms; rest periods during working hours; vacations with pay; pay for legal holidays; free ice water; electric fans; employes' organizations; insurance and retirement pensions; profit-sharing, bonus and premium plans. Welfare work is not developed to any great extent in any of the 275 plants investigated.

First-aid facilities, which are an absolute necessity in plants where dangerous machinery is used, are found in 134 establishments. These consist mostly of first-aid cabinets. In 5 large factories hospital rooms are provided and in 4 of them nurses are in charge. Some plants have a physician on the premises during certain hours daily. Thirty-five plants, in which the machinery is of a more or less dangerous nature, have no first-aid facilities. In the remaining 106 factories no special provisions are needed, as very little machinery of a dangerous type is used.

Sixteen plants provide rest rooms and 30 have couches or chairs in their dressing rooms. Where a rest room cannot be provided a couch in the dressing room is very essential. Girls often become sick while at work and should have a place to retire until they are able to go home. In one establishment a girl who was ill was lying on a lunch table. In another a girl was resting on a box and a chair, and in a third a girl was lying in a very awkward position, her head on a stool and her feet on a toilet seat. One large factory had a perfectly good couch in a storeroom with a lot of rub-

bish. It was taken out of the dressing room, the investigator was told, because "the girls were always lying down on it." In this particular plant much of the work is performed standing and girls were seen working without shoes to rest their tired feet.

Rest periods of 10 to 15 minutes, mornings and afternoons, are given in a few of the larger establishments.

Only one concern seen in this investigation, a candy factory, gives its factory employes a week's vacation with pay every summer. The practice of paying time or day workers for legal holidays obtains in 62 of the 239 establishments having the time or day work system.

Cold drinking water is furnished free during the summer months in 170 plants. In a few a charge of 5 cents a week is made for ice. Cool drinking water is very essential in warm weather. In 70 establishments water is cooled by being passed through coils in tanks or barrels containing ice, but not coming in direct contact with it. In 55 plants sanitary drinking fountains are provided and the water cooled before it reaches the fountains, while in 100 the old-fashioned water coolers or crocks are still in use. The common drinking cup is also found in a majority of factories. A few require employes to bring their own cups or glasses and some provide paper cups.

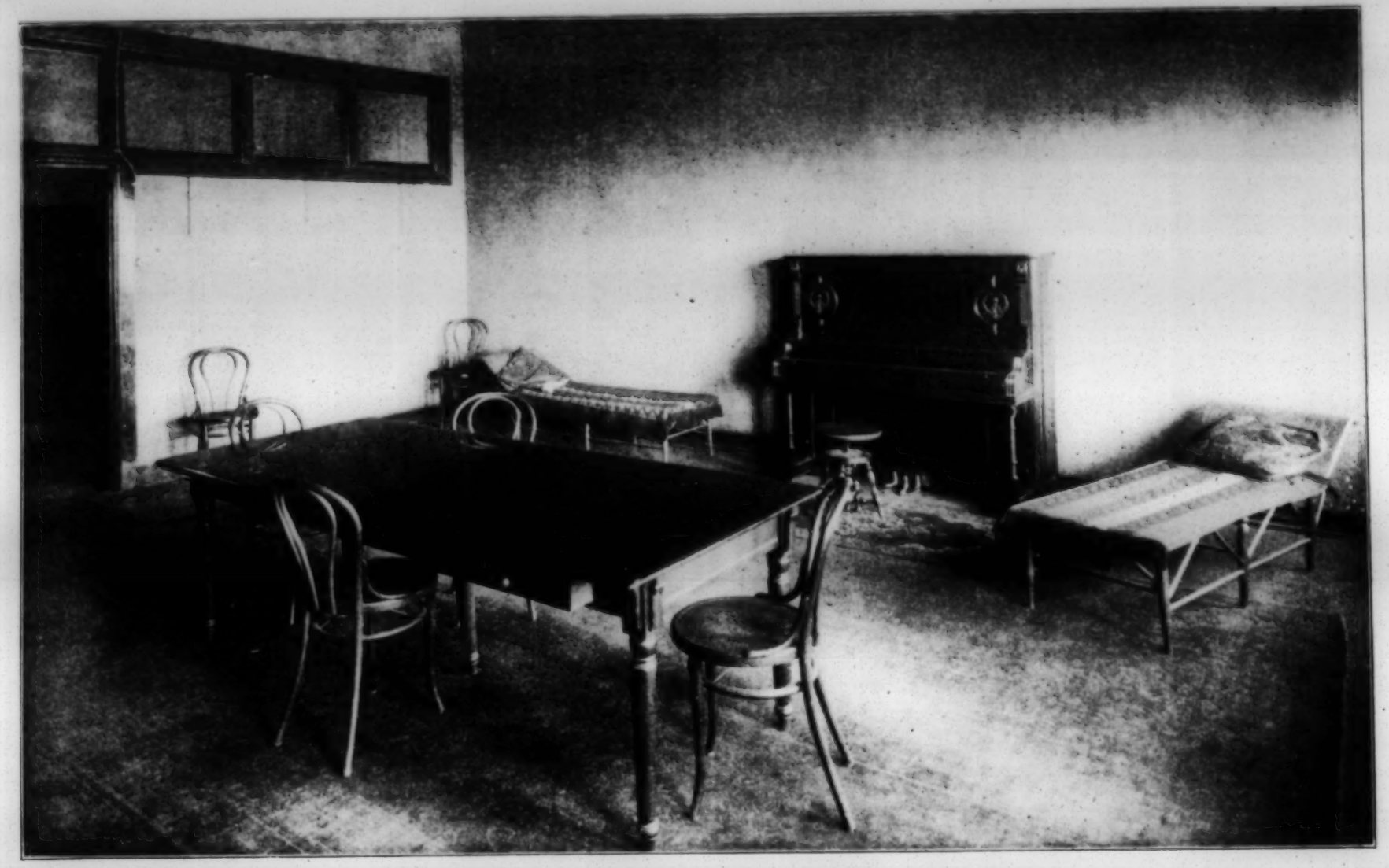
Employes' organizations, controlled and operated by them, are found in seven large factories. These are chiefly mutual aid associations, allowing their members a weekly benefit in case of sickness or accident, and providing funeral expenses in case of death.

Seven large concerns carry insurance on their employes, the amount depending on the length of service. In case of death the family of the insured is paid a sum equal to the amount of wages received by the deceased during the last year of his life. One of these concerns has a fixed minimum of $250 and another of $500. The maximum in both is $1000. The amount paid the beneficiary by these two concerns is determined by the length of time the deceased has been employd. One large firm also has a retirement pension in addition to its insurance feature.

Profit-sharing in its most general sense, which consists of distributing part of the net earnings of a business among the employes, has not been introduced by any of the establishments investigated. One large concern, however, has a profit-sharing plan which enables employes to buy the company's stock on monthly payments. An initial payment of 4% of the total is required at the time of purchase, the balance to be paid in installments.

Various forms of the bonus and premium plans are found in 21 factories. The most common form of bonus is that paid for completing an operation within a given time allowance, the time being determined by taking the average of past performances as a basis. Some firms also pay an additional bonus for all gains made on the time set. Another form of bonus is that given to increase the stability of the working force. In a number of plants a bonus of a certain per cent on each dollar earned is paid for regular attendance throughout the week, without tardiness or absence. One plant pays a quarterly bonus to employes who have been absent less than one week during the quarter. Bonuses are generally paid weekly or monthly.

The premium is usually given for 100% efficiency and is paid weekly. In some establishments a small weekly wage is guaranteed and a definite amount of work required to earn this wage. A premium is then paid for all work performed in excess of the required amount. A few concerns set a maximum wage for piece-workers and consider all earnings over the maximum a premium.



REST ROOM, WITH COUCH AND PIANO, AMERICAN BOOK CO.

IV.

WARTIME WORK FOR WOMEN

The withdrawal of thousands of young men for the army and for government work has opened new opportunities for employment to women. Among the 275 plants investigated there are 22 that are employing women as a war emergency. At this time this study was completed these together employed a total of 1000 women.* Eighteen of these concerns have never employed women prior to the summer of 1917, while four have employed them in small numbers on certain kinds of work before that time. The new work that women are doing requires greater physical effort than that usually done by women. They work side by side with men and are subject to the same conditions and surroundings, whereas in the older women-employing industries the best workrooms are set aside for women. Before the war industries where the work was hard and dirty could secure only a rougher class of women who were not always desirable. The war industries, however, are recruiting a rather refined and more or less intelligent class of women. They are drawing upon laundries, paper box, candy and shoe factories for their best workers. They are also making inroads on domestic service and even department stores. The higher wage these new industries offer is, of course, an inducement but the desire to do work that will "help win the war" is an important consideration. Although women are paid more in these new industries than in the old, they nevertheless receive a lower wage than that paid the men whose places they are taking. As far as could be learned, most concerns pay women from 2 to 9 cents an hour less than they formerly paid men, for work which is virtually the same as that performed by men. And yet employers claim to be well satisfied with their work. They say that they are more dependable and easier to instruct. One firm stated that its output has increased 10% since women are employed. The lower wage employers justify on the ground that women cannot work as rapidly and have not the mechanical skill of men. They seem to think, however, that in time women will be able to earn as much as men.

A fairly adequate idea of the comparative wages paid women in the old and new industries may be obtained from Tables V and VI. The first shows the initial minimum wage paid women in 239 plants which have the day or time work system. The second shows the initial minimum wage paid in 22 of these 239 plants in which women are being employed as a war emergency.

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*This number has greatly increased since, as many additional plants are now replacing men with women.

TABLE V.

THE INITIAL MINIMUM WAGE PAID IN 239 PLANTS HAVING DAY OR TIME WORKERS

Amount of Wages.	Plants Paying Same.
$ 4.00 per week	7
4.50 " "	6
4.75 " "	1
5.00 " "	38
5.50 " "	24
5.80 " "	3
6.00 " "	73
6.25 " "	3
6.50 " "	10
6.75 " "	2
7.00 " "	31
7.50 " "	12
8.00 " "	12
8.20 " "	1
8.50 " "	2
9.00 " "	6
9.50 " "	1
10.00 " "	6
11.00 " "	1
	239

It is evident from the above that the initial minimum is very low in these establishments.

The average weekly minimum for these 239 concerns is $6.24. The higher wages shown in the table are paid in many instances by firms just beginning to employ women.

TABLE VI.

THE INITIAL MINIMUM WAGE PAID DAY OR TIME WORKERS IN 22 PLANTS EMPLOYING WOMEN AS A WAR EMERGENCY

Amount of Wages.	Plants Paying Same.
$ 6.00 per week	1
7.00 " "	4
7.50 " "	3
8.00 " "	4
8.20 " "	1
8.50 " "	2
9.00 " "	3
9.50 " "	1
10.00 " "	2
11.00 " "	1
	22

The average weekly minimum for these 22 concerns is $8.24.

NATURE OF WORK

Among the establishments which are substituting women for men are machine shops, foundries, electrical machinery plants, automobile part factories, lumber mills and packing houses. In many of these plants women handle dangerous machinery, such as punch and drill presses, grinders, small lathes, riveting, soldering and stamping machines. Much of the work is performed standing and requires considerable physical exertion. In one plant a young girl was seen pressing the whole weight of her body against a machine in the act of turning a wheel. This operation, which seemed to tax her strength, was repeated at intervals of a few seconds. The investigator was told that the girl spends several hours daily at this machine. In foundries, where women are employed as coremakers, they frequently lift and carry weights that are much too heavy. This work is also performed standing. Seats are provided but are rarely used. Coremakers are also exposed to a great deal of smoke and to the fumes escaping from the drying ovens, which frequently penetrate the core rooms and vitiate the atmosphere. This notwithstanding the most approved form of roof construction in the foundries employing women, which is said to provide excellent ventilation.

Machinery is well guarded in all establishments where women are being introduced as a war measure. Some firms are taking special precautions with presses by attaching the hand clutch, which makes it necessary to use both hands while the machine is in motion. In several plants women are required to use tweezers or small iron rods to insert and remove material, especially when the parts handled are small. This obviates the need of putting the hands near the dangerous parts of the machine and is a very commendable safety measure. Many concerns have also adopted a uniform, consisting of overettes and caps, but none has as yet put the ban on high-heeled shoes, which have already caused some minor accidents through falls.

Although women have always been employed in packing houses in other cities, it is only recently that they are being employed in this industry in Cincinnati. The meat packing plants now have women in the sausage casing and pork trimming departments. The work requires continual standing. No seats are provided in any of the establishments. Women stand all day on slimy, wet floors, in heavy rubber or leather boots. In some plants wooden platforms are placed in front of the tables at which women work, but these too are usually wet. In the sausage rooms the work is very hard, requiring the handling of large, heavy sausages, which are tied with thick cord. In the trimming rooms the women handle heavy sides of pork. There they are also exposed to the nauseating order of fresh meat.

The physical comforts of women are nevertheless well cared for in the majority of the new women-employing industries. Most plants have good sanitary arrangements. Their dressing rooms, toilets and wash rooms are newly installed and provided with the most approved, modern equipment. Several concerns have rest rooms, others have couches in the dressing rooms. Some firms have introduced the rest period mornings and afternoons. Where seats are supplied they generally have the back support.

WOMEN OPERATING PUNCH-PRESSES, GLOBE-WERNICKE CO.

V.

GENERAL FACTORY PROCESSES

A large number of women in factories are employed at operations known as general factory work. These vary somewhat with each industry, but are nevertheless quite similar in character. Of the 275 plants investigated 192, representing 15 industries, employ women for general factory work only. Of a total of 31,453 wage earners in these establishments 11,523 are women and girls. They are employed chiefly at operations known as assembling, feeding, folding, polishing, glueing, labeling, cutting, wrapping, packing, finishing and sewing. Although much of the work which women do in factories is simple and somewhat mechanical, it is, however, physically exhausting due chiefly to the conditions under which the work is carried on. Most factory work is monotonous in the extreme, requiring constant repetition of the same motions and involving considerable nervous strain. While the majority of the industries covered by this study have no special health hazards, the evils of constant standing, long hours in seasonal trades, jarring processes, noisy workrooms and speeding are common to many, and these are highly injurious to health. The drab and dingy character of the average workroom is also an important factor in lowering the vitality and reducing the efficiency of workers.

SPECIAL FACTORY PROCESSES

These were investigated in ten industries, employing not less than 100 women each and having some special health hazard. A total of 81 establishments were covered, with 9198 wage earners, 5337 of whom are women. Among them are some of the most important women-employing industries included in this study (Tables VII and VIII App.) The industries will be described in the order named: Printing and Publishing; Cigar Making; Laundry; Dry Cleaning; Candy Making; Baking; Cordage and Twine; Knitting; Mattresses and Bedding, and Rag Sorting.

PRINTING AND PUBLISHING

Fourteen establishments, including printing shops, binderies, art work and lithographing concerns, were investigated in this industry, employing a total of 3321 wage earners, of whom 1486 are women. The chief processes are composing or type setting, press feeding, proofreading, sewing and gathering or collating. Most of the important processes are performed

by men, but women are becoming an essential factor in the industry. In printing establishments they do hand type setting, hand and power press feeding and proofreading. In art printing women do hand and aerograph painting. They also constitute a large proportion of the workers in binderies. There they inspect the printed matter; operate sewing and stitching machines; gather or collate the sections or signatures of books where no gathering machines are used, or where the books are too large to be gathered by machines; do sizing and gold embossing. Most operations performed by women in printing shops permit sitting, except in binderies, where the work requires both standing and walking. The women who collate the sections or signatures of books walk to and fro in the aisles between the stacked signatures and gather them together in numerical order. This work also necessitates much standing. In some establishments there is alternations of occupations, to permit collators to sit part of the time.

HEALTH HAZARDS

The chief health hazards in the industry are fatigue, lead dust from the type and fumes from gas heated metal pots in pressrooms where type machines are used. The latter is a factor in a few shops only, where there are no hoods and stacks over the metal pots to carry off the fumes, but is negligible in most establishments. Lead dust is present to some extent in all printing shops. Fatigue, due to eye strain, monotony and, in some plants, to piece work, is an important factor. Humidity is a slight hazard in one shop.

CONDITION OF WORKPLACES

Most printing establishments are housed in special factory buildings, but there are a number of shops in old loft buildings. Machinery is well guarded in all plants. No special ventilating devices are found in any. Workrooms are considered good in 6 plants, fair in 6 and bad in 2. Toilets are good in 6 shops, fair in 3 and bad in 5. Washing facilities are adequate in 3 establishments where hot water, soap and towels are provided; they are fairly adequate in 4, where hot water only is provided, and inadequate in 7. In 2 of the latter there are more than 20 workers to a spigot. Hot water, soap and towels are a necessity in an industry like printing, where workers come in contact with poisonous ingredients in the materials handled. Eight plants have lunch rooms, 4 serving meals and 1 hot coffee. In the 6 establishments having no lunch rooms less than 1 hour is allowed for the noon meal.

CIGAR MAKING

This industry was investigated in 13 establishments employing a total of 1766 persons, 1159 of whom are women. The first process in cigar

making consists of curing and drying the tobacco leaves, which is done by men. Other processes are tobacco stripping, cigar bunching, selecting leaves for wrapping and cigar rolling. Tobacco stripping and cigar bunching is done by women. Cigar rollers are both men and women. When the cigars are finished they are selected according to colors and packed. The selecting and packing is done almost entirely by men, although some women are employed at this process. The banding of cigars and the labeling of cigar boxes is done by women and girls.

The strippers take the tobacco off the stems. This is both machine and hand work. The workers, many of whom are older women, sit in stalls on low stools or boxes, surrounded by "stock." The stalls are narrow and very close together and the workers are crowded. Near them are the women who select tobacco leaves according to color and quality to be used for rolling or wrapping. The bunchers or fillers make the inside of the cigar and prepare it for the outer wrappings put on by the rollers. This, too, is both hand and machine work, although the better grade of cigars are "bunched" by hand. At this process the workers sit at low tables, close together, and work at high speed. After the bunching operation is finished the rollers put on the wrappings and the cigars are then ready for selecting, banding and packing. These operations can be performed sitting, but the workers usually stand, although seats are provided.

HEALTH HAZARDS

The tobacco industry has long been considered very injurious, and tobacco workers are said to be greatly predisposed to tuberculosis. Authorities, however, differ on this subject. In 1916 the U. S. Public Health Service made a study of the predisposing causes of tuberculosis among industrial workers in Cincinnati. Cigar making was one of the trades selected and 631 cigar makers, both male and female, were examined. Only three of these were found tuberculous (P. H. Bul. 73, p. 51). The chief health hazard in this industry is fatigue, due to monotony, overcrowded workrooms and piece work. Dust from dry tobacco leaves is present in all establishments.

CONDITION OF WORKPLACES

The buildings in which cigar factories are located are nearly all old. Some of them have dark workrooms, requiring the use of artificial light in the daytime. Where lights are used they are usually unshaded electric bulbs. Ventilation is poor in many plants and especially so in one which has very low ceilings. None of the establishments inspected has any ventilating devices. Workrooms are considered good in 5 factories, fair in 7 and bad in 1. Fairly adequate washing facilities are found in 2 plants, which provide hot water, and inadequate facilities in the remaining 11. Four of the latter also have not enough spigots for the number of workers. Two plants provide lunch rooms. Of the 11 having no lunch rooms 9 claim that 1 hour is given for the noon recess. But as most cigar factories have no definite schedule, workers coming and going as they please, it is difficult to determine just how much time they take at noon.

LAUNDRY PROCESSES

Laundry work was studied in 12 steam laundries employing a total of 1135 persons, of whom 986 are women. The special processes in the industry consist of marking, listing and sorting, washing extracting; shaking, starching, drying and ironing. Marking is the first operation, requiring the handling of soiled garments, which are not disinfected when they are brought in. This work is of a rather disagreeable nature. The markers usually do the listing and the sorters the assorting of the clothes after they are washed and ready for delivery. These operations are performed standing.

WASHING, SHAKING, EXTRACTING

Washing and extracting, which is very hard work, requiring the lifting of heavy bundles of wet clothes, is done entirely by men. Women are employed to wash fine articles by hand. In most laundries the wash room is either in the basement or on the ground floor and is usually steamy and wet. The workers wear heavy wooden shoes or rubber boots to keep their feet dry. There are some plants, however, which, because of their excellent drainage and exhaust systems, keep their wash rooms dry and free from steam. In one of these the wash room is located on the top floor of the building.

The clothes are washed in machines which resemble hollow cylinders, known as wash wheels. After they are washed they are taken out of the machine and placed in the extractor, a perforated metal basket enclosed in an iron shell, in which the clothes are whirled around at great speed until the water is drawn off. They are then taken to the mangle room, where the shakers, usually young girls, shake out the twisted clothes and get them ready for mangling. The work of the shakers requires much physical effort as the articles handled are often large and rather heavy because they are partially wet. Very large pieces are handled by two women.

MANGLING, STARCHING, DRYING

When the clothes leave the shakers they go to the mangles, machines used to iron so-called flat work. These are operated by foot or power pressure and are heated by steam or electricity. The women employed at the mangles or flat work ironers, as they are sometimes called, perform two operations, feeding and folding. The feeders introduce the articles into the mangle, which consists of two or more padded rolls, covered with felt. The folders receive the articles as they come out dry at the other end and fold them. These operations are interchangeable. When the articles ironed are small folders may sit at their work. Feeders always stand, but by alternating the operations they are given an opportunity to sit some time during the day.

Collars, cuffs and shirts are sent from the wash room to the starching room, where they are first passed through starching machines, which re-

semble small mangles, and are then taken off and rubbed by hand. Special women are employed for this work. After they are starched they are hung on hooks attached to a traveling chain, and are sent to the drying room, a steam heated cabinet, kept at a very high temperature.

IRONING

When the articles leave the dryer they are dampened by machine and are ready for ironing. This, too, consists of hand and machine work. Hand ironing is the same operation as that performed in the home, except that electric irons are generally used. Gas heated irons are, however, still found in some laundries. Machine ironers are of various types, known as collar ironers, tippers and shapers and body ironers. These are heated by gas or steam. Some of the newer machines permit the operators to sit while working. The body ironer, used for ironing shirts, consists of two large padded rolls heated by steam or gas. It is operated by a foot treadle, which is above the floor, requiring a downward pressure to set it in motion. Some machines are harder to operate than others. A new machine, known as the body press, which is steam heated and operated by a slight foot pressure is now coming into use.

HEALTH HAZARDS

Fatigue, due to continual standing, heat, monotony, eye strain and irregular working hours on certain days in the week, is the principal hazard in the industry. Heat is complained of in all establishments, especially in warm weather. Steamy ironing rooms are found in some. Occasional overtime, due to rush orders, is required in nearly all laundries. The last three days of the week are usually busy days, especially Saturday, when the workers remain until all work is finished. Monday morning, however, some departments are idle until 10 or 11 o'clock, and sometimes until noon. This uneven distribution of work is largely due to the public demand that clothes should be collected the first four days of the week and delivered the end of the week. Housekeepers who send their laundry out as late as Thursday desire it back on Saturday. If laundrymen would agree among themselves to district the city so that clothes could be collected in certain sections each day, leaving some sections for the last two days in the week, overtime would be reduced to a minimum. This plan would make it possible to do the preliminary work of marking and sorting Saturday morning, thus enabling all departments to start on Monday at the usual time and to finish Saturday by noon. Night work was reported in one plant only. This lasted for two weeks and a special shift was engaged for the extra work.

CONDITION OF WORKPLACES

Most steam laundries are located in modern buildings, but a few are housed in old and rather dilapidated buildings. Machinery is well guarded in all the establishments investigated and all have some ventilating devices.

IRONING ROOM, THE MODEL LAUNDRY CO.

FLAT WORK IRONER

BODY PRESS

Work rooms are good in 5 plants, fair in 3 and bad in 4. Steam is a factor in 5 plants. Toilet accommodations are good in 4 laundries, fair in 6 and bad in 2. Washing facilities are adequate in 2, fairly so in 3 and inadequate in 7. One plant has a well equipped lunch room and furnishes meals at cost. Two have lunch room space and serve coffee free of charge. Nine provide no lunch rooms and 6 of these give less than 1 hour for the noon meal.

DRY CLEANING AND DYEING

Eight establishments representing this industry were studied for special processes. These employ together 200 wage earners, 106 of whom are women. The chief operations are dry cleaning, dyeing, drying, spotting, steaming and pressing. Machinery similar to that used in laundries is found in this industry. Both the cleaning and dyeing operations are performed by men. In one plant women are employed to clean gloves. The drying of the cleaned and dyed garments is done in steam heated cabinets. The garments are hung on sliding racks and are pushed into the cabinet so that the workers need not enter them. The spotting process, which consists of removing left-over spots by chemicals, is performed by women. The steaming of velvets is done by men. In this operation the worker is enveloped in clouds of steam and is subject to the danger of sudden changes in temperature when he leaves the steaming room for other parts of the plant. Pressing is done by both men and women. Men operate the tailor's press, used for ironing heavy garments. This consists of two padded boards and is heated by gas. The garment to be ironed is placed on the lower board, the upper is then pressed down upon it by means of a foot treadle. Women do hand ironing with the ordinary electric or gas heated irons. All work in dry cleaning establishments is performed standing. In several a chair is provided for each ironing board, but women were not seen using these while working. They may, however, be used for brief rest pauses during the day.

HEALTH HAZARDS

Fatigue is the chief health hazard in the industry, due to constant standing and long hours. Dry cleaning is considered a seasonal industry. The busy seasons formerly came in the spring and fall, but within the past few years the work seems to be more uniformly distributed throughout the year. During certain months, however, the volume of work increases and much overtime is required. Repeated violations of the 50 hour law for women is found in nearly all establishments. Naphtha or benzine, used in the process of dry cleaning, generates fumes which, in some plants, permeate the entire building, and constitute a serious menace to health. Exposure to these fumes for many hours a day is likely to result in disorders of the stomach.

CONDITION OF WORKPLACES

Three concerns are housed in modern buildings and 5 in old, remodeled buildings, 1 of which is decidedly overcrowded. The workrooms are good in 2 plants, fair in 2 and bad in 4. All establishments have ventilating stacks connected with the machinery used in the dry cleaning rooms, but in some the naphtha fumes penetrate other workrooms. Toilets are good in 3 plants, fair in 1 and bad in 4. Adequate washing facilities, with hot water, soap and towels, are found in only 1 plant, fairly adequate in 3 and inadequate facilities in 4. There are no lunch rooms in any of the dry cleaning establishments and less than 1 hour is allowed for the noon recess in 4. The remaining 4 provide for a 1 hour schedule but this is frequently reducted to 30 minutes.

CANDY MAKING

Candy making was investigated in 14 factories having a total working force of 956—726 of whom are women. The chief processes in the industry are cooking, cooling, casting (in starch) dipping, wrapping and packing. Men are employed at cooking, which is done by steam or by open fire, depending on the kind of candy made. The temperature of cooking rooms ranges from 70 to 100 degrees Fahrenheit, according to the outside temperature. Women are employed at the casting process in making gum drops, marshmallows and other candies which are cast in starch. They are also employed at chocolate dipping, which is done both by hand and machine. This work is carried on in insulated rooms which are kept at a temperature of 67 to 70 degrees throughout the year. Women are also employed at wrapping individual pieces of candy in oiled paper and at filling boxes, an operation known as packing. During warm weather packing rooms are also kept at a very low temperature. Much of the work in candy factories is performed standing.

HEALTH HAZARDS

Sudden change in temperature is the chief hazard to workers employed at hot and cold processes. Hand chocolate dippers work at hot kettles in cold rooms but they usually wear warm clothing. Fatigue is a factor in many processes due to continual standing, speeding and overtime at certain seasons of the year. The breathing of starch dust by workers in the casting rooms is disagreeable, but not injurious, as starch dust is considered the least harmful of all dusts.

CONDITION OF WORKPLACES

Candy factories are housed in special factory buildings, but the majority of them are very old. Workrooms are considered good in 2 plants, fair in 6 and bad in 6. In one establishment a dark, interior room, lighted by a few unshaded electric bulbs, is used for chocolate cooling. Toilets are good in 2 plants, fair in 7, bad in 4 and very bad in 1. In the latter they open directly into workrooms and are ventilated by air shafts. Washing facilities are adequate in 4 establishments where hot water, soap and towels are provided, fairly adequate in 6, where hot water only is supplied, and inadequate in 4.

Three concerns provide lunch rooms while 10 of the 11 making no lunch room provisions, allow less than 1 hour for the noon meal. Special garments, such as white aprons and caps for women and white overalls for men, are required by a few concerns. But these are laundered at the expense of employes and are not always as clean as they should be. Medical examination of employes is not required in any of the candy factories investigated.

BAKERY PROCESSES

Six establishments were investigated in this industry, 3 of which are bakeries, 1 a pastry factory and 2 cracker factories. These employ a total of 732 wage earners, 287 of whom are women. The chief processes are mixing, cutting and baking. Nearly all of the work is done by machinery. Men operate the dough mixers, the cutting and weighing machines. They also put the bread into the ovens. In bakeries women are employed mainly to wrap bread. In the pastry factory they work at the pie-making machine. In the cracker factories women ice cakes, pack cakes and crackers into cartons and weigh the filled cracker boxes. In one cracker factory they tend a revolving gas oven used for baking sugar wafers. In the other they are now employed to feed the cake machine, to grease cake pans and to scrap the cracker machine, all of which work was formerly done by men. Nearly all operations in this industry are performed standing. One plant has been trying out the plan of alternating certain operations that more women may have an opportunity to sit part of the time.

HEALTH HAZARDS

The principal health hazard in the industry is fatigue, due to continual standing, overcrowded and noisy workrooms. In bakeries, where women wrap bread, hours are irregular. The work usually begins at noon or in the afternoon and lasts until late in the evening. Some

plants also have Sunday work, but give time off during the week. The piece-work system prevails in a few establishments for certain operations. Much of the new work at which women have recently been placed in bakeries is paid for on this basis.

CONDITION OF WORKPLACES

One concern is housed in a new, modern fireproof building, 1 in a fairly modern building and 4 in very old buildings. Heat, which is considered one of the outstanding features of the baking industry, is a negligible factor in 4 plants, but is quite a factor in 2. One bakery has an excellent ventilating and air washing system, which keeps the temperature of the room in which baking is done at 75 degrees all year. Another has a very good suction system connected with the ovens, which carries off the gas fumes and reduces the heat of the baking room. In one plant the revolving gas ovens used for baking sugar wafers have no exhausts and, consequently, the gas fumes penetrate the workrooms. Partially dark workrooms, artificially lighted in the daytime, are found in 1 establishment. Workrooms are considered good in 3, fair in 2 and bad in 1 plant. Toilet accommodations are good in 1 plant only, fairly good in 4 and very bad in 1. In 2 establishments the toilets open directly into the workrooms. One concern only has adequate washing facilities, with hot water, soap and towels. Two have fairly adequate facilities providing hot water, and 3 have decidedly inadequate facilities. Hot water should be a legal requirement in all establishments where food products are handled.

Lunch rooms are provided by 2 concerns, 1 of which furnishes meals and the other soup, coffee and crackers. Of the 4 concerns which provide no lunch room space, 1 allows only 30 minutes for the noon recess. Special garments for men and women are required in 3 establishments. In 1 all new employes are subjected to a medical examination before they are admitted to work.

CORDAGE AND TWINE

This is a small industry represented by only 3 concerns, employing 216 wage earners, 149 of whom are women. The chief products manufactured by these concerns are twine and cord, clothes lines, braid, shoe laces and cotton belting. The yarn used in the manufacture of these articles is received in the finished state, having been spun in eastern textile mills. The processes vary somewhat in each establishment, but there are a few operations such as dyeing, bleaching, spooling and braiding which are common to all. One plant has 2 additional processes, twisting and weaving, while the operation known as winding is found in 2. Men are employed at dyeing and bleaching.

both of which processes produce a great deal of heat and humidity. Another process carried on under high temperature and some humidity is that known as finishing, which consists of starching a certain kind of twine, made by 1 concern. This, too, is done by men. After the yarn is dyed or bleached it is transferred from the skeins to spools, an operation known as spooling. The women employed at this work tend from 20 to 40 spools each, according to their skill. The work is performed standing and also necessitates much walking. The spools are then placed on the braiding machines, used for making cord, clothes lines and braid. Cord and braid have to go through another process before they are ready for the market, known as winding or tubing, according to whether they are wound on cones or tubes. In the making of cotton belting the yarn is transferred from the small spools to a machine known as the twister, which in turn winds it on very large spools. It is then ready for the looms which weave the belting. Men operate the looms, each tending from 3 to 6.

HEALTH HAZARDS

The chief hazard in this industry is dust, found in greater or less quantities in each plant. Workers are exposed to this constantly and often complain of irritation of the nose and throat. Fatigue is also an important factor. The work is monotonous and requires a high degree of concentration which involves great physical strain. It also requires much standing. Another cause of fatigue is the excessive noise characteristic of the industry, which sometimes results in deafness.

CONDITION OF WORKPLACES

One firm is housed in a very excellent new fireproof building, 1 in a fairly good remodeled building and 1 in a very old building. The latter has many dark, unwholesome, workrooms. Mechanical means of ventilation are lacking in all establishments. There are no suction systems to carry off the dust. Workrooms are considered good in 2 plants, and bad in 1. Toilet accommodations are fair in all establishments. Washing facilities are fairly adequate in 1, having hot water, and inadequate in the remaining 2. Lunch rooms are provided by 2 concerns, but 1 claims that employes do not make use of it. The 1 concern which has no lunch room allows less than 1 hour for the noon recess.

KNITTING

This is another small industry represented by 2 hosiery mills, employing together 198 persons, 160 of whom are women. The chief processes are picking, carding, spinning, winding, ribbing, knitting and looping.

The first 3 are found in 1 establishment only, which gets its material in the raw state. The remaining 4 are common to both. The picking of wool or cotton is a very dusty process and is done entirely by men. The picking room, in the plant in which this operation is carried on, is provided with a good suction system, but there is nevertheless a great amount of dust. Carding is done by both men and women. This, too, is very dusty work. The machinery in carding rooms is also very noisy. After the wool or cotton is carded it is ready for spinning, which is done by women, mostly young girls. Each spinner tends 3 "mules" each of which has 330 to 360 spindles. This work requires much standing and also considerable walking. The worker is on the alert constantly, watching every spindle for broken threads which she ties together. The spinning room is also very dusty.

When the spindles are filled they are taken to the knitting room where the yarn is transferred to bobbins. This process is known as winding. The winders tend from 18 to 24 bobbins each. The work is performed standing and also requires some walking. The next operation is ribbing which consists of making, by machine, the upper or ribbed part of the hose. The lower part is then knitted to this. Knitters tend 2 or 3 machines. The knitting room is dusty and also very noisy. In the final operation, known as looping, the toe of the hose is sewn together. This is the only process performed sitting. In both establishments in this industry the loopers sit facing a strong light. Some wear eye shields. The hose are then washed, dyed, stretched on forms and placed in a steam heated drying chamber. When they are ready for shipping, girls pack them into large packing cases.

HEALTH HAZARDS

The breathing of fine wool or cotton dust is the chief hazard in this industry. Noisy workrooms and continual standing are important factors in producing fatigue. Seats are not always provided as they cannot be used except for momentary rest pauses. The monotony of the work and the nervous strain involved in the constant attention which the rapidly moving machinery requires are also fatigue factors.

CONDITION OF WORKPLACES

Both concerns are housed in old buildings, remodeled from time to time, and have only fair workrooms. The toilets are fair in 1 plant and rather bad in the other. No hot water is provided in either. Neither are lunch rooms provided and in 1 establishment only 30 minutes is allowed for the noon meal. Employes are thus compelled to eat in the dusty workrooms sitting on boxes or window sills.

MATTRESSES AND BEDDING

The processes in this industry were investigated in 5 establishments, 3 manufacturing mattresses, 1 comforts and 1 pillows and cushions. These 5 concerns employ 449 wage earners, 178 of whom are women. The chief operations in the manufacture of mattresses are picking, bleaching and carding cotton, and filling ticks, all of which are performed by men. Minor operations, such as cutting and sewing mattress ticks, finishing ticks and tufting mattresses are performed by women. In the comfort factory women cut and tack comforts. In the pillow factory women cut and sew the pillow ticks and fill them with feathers. The grinding and renovating of feathers is done by men. Much of the work at which women are employed is performed standing.

HEALTH HAZARDS

The chief hazard to health is the breathing of fine lint and cotton dust, found in large quantities in the mattress factories and to some extent in the comfort factory. The picking and carding rooms in 3 plants are filled with dust notwithstanding the exhaust systems provided in these rooms. In the bleaching room of one plant the workers, all men, are exposed to a very high degree of heat and humidity. The element of fatigue is also present, due to the many operations which require constant standing and to hurrying piece work in some departments.

CONDITION OF WORKPLACES

Two concerns are housed in modern factory buildings, 1 in a remodeled building and 2 in very old buildings. Workrooms are fair in 3 plants and bad in 2. In one of the latter, old newspapers and rags cover the windows of the main workroom to keep out the glare of the sun. Toilet conditions are good in 1 factory, fair in 2 and bad in 2. Two have fairly adequate washing facilities, supplying hot water, while 3 have inadequate facilities. Lunch rooms are found in 3 plants. In 1 which provides no lunch room less than 1 hour is allowed for the noon recess. Workers eat their lunches in the workrooms, which are exceedingly dusty in this plant.

RAG SORTING

This process was investigated in 4 establishments, in 2 of which it forms an auxiliary feature. These establishments employ a total of 225 wage earners, 100 of whom are women. Rag sorting consists of

separating woolen from cotton rags, separating cotton rags according to color and also separating threads for the making of waste. Women are employed at these operations. They are also employed in one of the plants to mend burlap sacks. After the rags are sorted, they are baled by machinery operated by men.

HEALTH HAZARDS

Dust, which is found in very large quantities in 2 establishments, is the principal hazard in this industry. The exposure to disease, from the handling of rags, is a slight hazard in 2 plants. One firm disinfects the rags while they are still in the cars, before they are brought into the plant. Another handles only cuttings which are bought from tailor shops and overall factories. Fatigue, due to faulty postures is also a factor in the industry. In the sorting process in 2 plants women sit on low stools or boxes, in uncomfortable, stooping positions. In 1 plant the rags are arranged on counters and the workers sit on high stools. In another the rags are thrown into a large pit. Here the workers stand much of the time, but may sit if they so desire.

CONDITION OF WORKPLACES

Two firms are housed in old buildings, one of which is quite delapidated and is heated by coal stoves. The other 2 are housed in modern buildings. Workrooms are considered fair in 2 plants and bad in the remaining 2. In 1 plant cold is always complained of in winter. Toilets are good in 1, fair in 1 and bad in 2 establishments. One concern has fairly adequate washing facilities, supplying hot water. Three have inadequate facilities. A lunch room is found in 1 plant, but it is rarely used because of the large quantities of dust which cover tables and benches. Less than 1 hour for the noon meal is allowed in 1 of the 3 plants having no lunch room provisions. Special garments, consisting of caps, aprons and gloves, are required in 1 plant, in which the conditions are otherwise better than in the remaining 3.

CONCLUSION

As a result of this study data is now available on the working conditions in 275 industrial establishments, affecting 16,924 women and girls. The establishments investigated are a fair proportion of the total number in and about Cincinnati, and the conditions found

may be regarded as an index to conditions in general. Taken as a whole the plants seen are fairly good. There are some among them in which physical conditions are excellent and great care is given to the comfort of employes. The commendable features, mentioned in the foregoing pages are: (1) a large number of fire-proof buildings; (2) a fair percentage of well kept dressing rooms; (3) general compliance with the 50 hour law for women, except in seasonal industries; (4) practically universal observance of the Saturday half-holiday.

Conditions common to many establishments which need to be remedied are (1) inadequate washing facilities due to absence of hot water, soap and towels; (2) dark and poorly ventilated toilets; (3) failure to provide lunch rooms; (4) unwashed windows, dirty walls and ceilings in workrooms.

It is evident from this study that women are employed at too many processes requiring constant standing; that little attention is given to the provision of proper seats; that there is considerable violation of the child labor laws, due both to indifference on the part of employers and wilful disregard of the laws; that the minimum initial wage paid women and girls is very low; that welfare work is practically unknown outside of a very small number of establishments.

This study has also revealed the need for better enforcement of existing laws as well as the need for initiating legislation to standardize washing facilities, dressing rooms and cleanliness of workrooms.

VI.

HOME WORK IN THE CLOTHING INDUSTRY

This study was undertaken to determine the extent of home work in the clothing industry and the kind of work done in homes. There are two distinct types of home work in this industry (a) making custom tailored garments in small home shops, which is done by men, and (b) finishing garments for contract shops, which is done by women. Before going into the details of this investigation, an explanation of the organization of the industry is essential to a clear understanding of the facts.

The clothing industry in Cincinnati is in the hands of three groups of manufacturers, wholesale clothiers, tailors-to-the-trade or special order houses, and custom or merchant tailors. The first group manufactures ready-to-wear garments in quantity and to stock sizes; the second manufactures higher grade clothing to individual measure, in quantity and as a rule, for out-of-town trade. In this group are the mail order concerns. The third makes garments to individual order for local trade. The last named are the more expensive garments having much hand work. Custom tailors are unique in that they maintain no workshops of their own. The garments are cut and fitted on their premises, but are invariably made in small shops, where only a few outside helpers or none at all are employed. There are also three distinct classes of workshops in the industry. The large fac-

tories of the wholesale clothiers, the contract shops housed either in the factory buildings or on the outside, and the custom tailor shops.

This study concerns itself with contract shops outside the factory buildings and merchant tailor shops. It covers (a) *location* of shop; (b) *number of employes;* (c) *hours of work* for women and minors; (d) *sanitary conditions;* (e) *fire protection,* and (f) *home finishers.* A total of 180 workshops were investigated, 72 of which are contract shops, doing work for 21 wholesale and special order houses, and 108 tailor shops, doing work for 57 merchant tailors. The larger contract shops are regularly inspected by factory inspectors, but the smaller contract shops and the majority of tailor shops are under no supervision. Many of them are in private dwellings or tenements, and, as they are neither registered nor licensed, there is no record of them. The list of 180, visited in this study, was compiled after considerable effort was made to obtain the names and addresses. It is fairly representative, but does not include *all* of the home shops, the actual number being unknown. To obtain an adequate idea of conditions in these shops a brief description of the subjects included in the investigation is necessary.

LOCATION

Sixty-nine shops are located in office or store buildings, 56 of which are custom tailor and 13 contract shops. One hundred and eleven shops are located in dwellings or tenements, 60 of which are tailor and 51 contract shops. Among them are 22 fairly large contract shops in rural communities. These are housed in one-story frame buildings, erected in the rear of the owner's residence, or they occupy the first floor of the residence. Of the 60 custom tailor shops housed in private dwellings or tenements, 29 are connected with living rooms or are being used as living rooms. Ten of the latter employ outside help, thus violating the Sweat Shop law (Sec. 102 and 1021, App.), which permits the making of wearing apparel in the home, but prohibits the employment of outsiders when the workroom is connected with a living room.

Light is good in the rural shops, but is only fair in most of the shops in private dwellings and tenements. Ventilation is poor in nearly all the shops inspected, especially in the larger shops, where gas irons are used for pressing. Many of the workrooms connected with living rooms are used both for cooking and sleeping purposes. Frequently the family washing is hung in the workroom. Children, too young to go to school, are usually kept there that the mother, who assists with the sewing, may take care of them. It is only in the *custom* tailor shops that workrooms are connected wih living rooms. The operators in this branch of the trade are now principally Italians who live in rather congested quarters in old tenements. Their helpers, outside the family, are usually young immigrant girls and boys who do not speak English.

NUMBER OF EMPLOYES

Of the 180 shops investigated 127 employ outside help, the number of employes varying from 1 to 50, according to the character and size of the

shop. The contract shops have, as a rule, the largest number. Custom tailor shops rarely have more than 5 or 6 employes. A total of 1079 wage earners is found in these shops, 792 of whom are women and girls. The contract shops employ 569 women and girls and 194 men and boys, or 763 of the total. The tailor shops employ 223 women and girls and 93 men and boys, or 316 of the total.

HOURS OF LABOR

The labor laws are fairly well complied with in the city shops, except during the busy seasons, when frequent violations occur. In the rural shops the violations during rush periods are even more flagrant. There all the employes are recruited from the immediate neighborhood of the shops. They begin work as early as 6:30 in the morning and often work until late at night. They eat their lunches at the machines and some even work while eating. The investigator has seen many working during the noon hour. Many children are employed without certificates in these rural shops, working the regular hours. Some that were seen were much too young to work. The actual number of hours which women and minors work in the Italian custom tailor shops could not be definitely ascertained, as many of the employes do not speak English. But evening visits made to some of the larger shops in busy season did not reveal any women or minors at work, although men were working overtime.

SANITARY CONDITIONS

Of the 69 shops located in office or store buildings 34 have unsanitary toilets, wash rooms or dressing rooms. The office buildings in which they are housed are very old and neglected. The shops use the public toilets provided in the building. Many of these are dark, poorly ventilated and not very clean. Among the 180 shops investigated there are 23 with poorly ventilated toilets, 25 employing more than 5 women each, without washing facilities and 31 employing more than 5 women each, without dressing rooms. The proprietors claim that their employes live in the neighborhood and do not need washing facilities or dressing rooms. They come in their working clothes and hang their outer garments in the workroom. Inadequate dressing rooms are found in 19 shops. Many of the shops located in private dwellings and tenements have outside toilets of the anti-freezing or plunger type. The rural shops all have outside toilets as the towns in which they are located have no sewerage systems.

FIRE PROTECTION

Most of the shops located in private dwelling or tenements, of which there are 111 in all, are on the first or second floors. Those located above the second floor in tenements have the required fire escapes. Of the 69

shops housed in office or store buildings, only two have inadequate fire protection. These are in a very old office building which has no fire escape. Two other buildings, with 4 shops each above the second floor, had no fire escapes when they were first visited, but have since had them built. Several shops have fire escapes that are not easily reached. In one a double row of machines is in front of the fire exit. In two others a stationary wash stand is in front of the window leading to the escape.

HOME FINISHERS

Twenty of the city contract shops admitted that they use home finishers. In the 15 shops of one rural community every proprietor said that he has home finishers and added that "nearly every woman in town does home work." The town has a population of about 2000 and tailoring is its principal industry. In the custom tailor shops finishing is done on the premises, except occasionally when the proprietor brings work home. It was very difficult to obtain a complete list of home workers from the contractors employing them. Many of them knew their finishers only by their given names and few had correct addresses. A list of 40 finishers was secured of whom only 25 were located.

Of the 25 home finishers visited 2 are widows living alone, and are entirely self-dependent; 3 are widows with children and are partly self-dependent; 6 are single women, widows or deserted wives living with relatives; 14 have husbands or other wage earners in the family. There are 45 children in these 25 homes, of school age and under.

LIVING CONDITIONS

The homes of these finishers are of varying degrees of comfort and cleanliness. In every instance the work is done in the living room, which is usually the dining room and kitchen combined and which, in a few cases, also serves as a bedroom. While some of the workrooms are very clean, others are exceedingly dirty.

A. Mrs. B. is an American woman with a tuberculous husband. She lives in 3 rooms. With her live her married daughter with her husband and child. She sews buttons on coats, for which she receives from 22 to 25 cents per 100, according to the size of the button. She was working in the kitchen when the visitor called, which was very untidy and full of steam. Her tuberculous husband and grandchild were in the room with her.

B. Mrs. G. is an Italan finisher who has a husband and 7 children. The husband works intermittently and the oldest child, a boy of 16, also works. Mrs. G. finishes coats for a contractor, who receives his work from one of the best clothing firms in the city. She earns about $1.50

a week. She does her sewing in the kitchen, which was very dirty when seen. A pile of coats was lying on the floor and a baby, with eczema on its face, was playing on the coats. Five other children of various ages were in the room. This family of 9 occupies 2 rooms, one of which was closed because the day was very cold.

C. Another Italian women, Mrs. R., finishes coats, for which she receives about 30 cents a dozen. She does her work in her kitchen, which is very dark and small. A heap of rubbish in one corner of the room and a pile of unwashed dishes and cooking utensils which were still on the table when the visitor called at 4 in the afternoon, bore testimony to the fact that Mrs. R. has not much time for her home duties. Mrs. R's 3 children were playing about the room among the coats. Her husband attends to the grocery store which occupies the front part of the building, the family living in the two rear rooms.

D. Mrs. X. and her two daughters were sewing in their kitchen, a fairly large room, but rather disorderly. Several children were playing around. A man, apparently out of work, was standing near the stove. While the investigator was there two neighbors and their children came in and sat down on a bundle of coats. There were then 6 adults and 4 children in the room, which had all windows closed, and the air was stifling. Mrs. X. is fairly comfortable. She works for pin money. Her husband and several children work and the family occupies 5 rooms, but 4 are generally closed during the day in cold weather. Mrs. X. and her daughter earn about $4 a week because their work is irregular.

WAGES OF HOME FINISHERS

The wages paid home finishers are lower than those paid for the same kind of work in factories, and the rates vary with the contractor. One pants finisher stated that she and her mother, working without interruption, can earn $1.25 a day. Another woman said that she earns 50 cents one week and $1.70 the next, depending on the amount of work she can get. She is a coat finisher and is paid 9 cents a coat. It takes an hour to finish one. Coat finishing is paid for according to style and the kind of work done, some receiving as little as 30 cents a dozen, and some as high as $1.44 a dozen. Pants finishers are paid according to the amount of work required, the pay ranging from 4 to 15 cents a pair. The work is very irregular and in busy season the hours are long. One woman stated that she rose at 4 in the morning the day the investigator called to do her own work before she began her sewing, and that she expected to work until late that night. The largest earnings reported by a finisher were those of a vest maker, who said that she receives 15 cents an hour and in busy season works 9 hours daily, thus earning $1.35 a day.

Although the actual amount of home work in the clothing industry is not known, there is cause to believe that it is considerable. The chief reason for its existence is the benefit accruing to the employer, who gets his work done cheaper in homes and at the same time saves on overhead expenses.

The consumer gains nothing by the reduced cost in production. He pays the market price and, in addition, runs the risk of contracting disease by purchasing clothing which is made in all sorts of homes. Custom tailored garments, which are higher priced than ready-made clothing, are, in many instances, as stated above, made under similar conditions in home tailor shops. From the evidence secured in the course of this investigation there appears to be very sound argument for abolishing every form of home work.

1. Because clothing sent out to homes is often made or finished under bad sanitary conditions.

2. Because there is danger of spreading disease by sending garments to homes that are under no supervision.

3. Because the low wages paid home workers tend to reduce wages in factories and to lower the standard of living of both home and factory workers.

VII.

In view of the facts revealed through the investigation of factories and the study of homework, the Consumers' League desires to make the following recommendations:

RECOMMENDATIONS FOR LEGISLATION

1. Fire drills should be made compulsory in all establishments having workrooms above the third floor, and should be practiced at least once each month.
2. Sec. 1009, Ohio Laws, should be amended to include definite standards for the equipment of dressing rooms and wash rooms.
3. Hot water should be required in all industrial establishments having more than 10 employes.
4. Definite standards for the cleanliness of workrooms should be adopted and made a legal requirement.
5. All factories and workshops should be required to register with the Industrial Commission of Ohio that a complete list of them may be obtained.
6. Home work should be abolished by law.
7. The employment of women on night shifts should be prohibited.
8. An appropriation for more women factory inspectors should be secured, providing for at least two additional inspectors for Cincinnati.

RECOMMENDATIONS FOR WELFARE WORK

1. Employers in factory districts should provide community lunch rooms for their employes, where meals may be obtained at low lost, thus obviating the need for eating cold lunches.
2. At least four legal holidays should be observed by all industrial establishments, for which employes who have been with the firm one year or more should receive pay.
3. The custom of granting one week vacation with pay to employes who have been with the firm for a year and more should be universally established.
4. Rest periods of at least 10 minutes, mornings and afternoons, should be provided in all factories for women employes. Couches should be placed in dressing rooms.
5. Seats with backs and foot rests should be provided for the use of women employed at sitting operations. They should also be available for women who stand at their work. More processes should be adapted to sitting positions.
6. No woman should be required to lift repeatedly more than 25 pounds at a time.
7. In the substitution of women for men, care should be taken that the task is adapted to woman's strength.
8. Where women are replacing men in industry they should be paid the same wages as the men received whose work they are doing.

APPENDIX.

TABLE VII.

INDUSTRIES INVESTIGATED; TOTAL ALL WORKERS; TOTAL AND PER CENT OF WOMEN

Industry --	No. Plants.	All Workers.	No. Women	Per Cent Women
Auto parts	6	1,419	354	24.95%
Awnings and tents	5	39	32	82.05%
Calculating machines and registers	2	362	42	11.60%
Carriages	5	639	112	17.53%
Cigars and tobacco	13	1,766	1,159	65.63%
Clocks and watches	3	240	26	10.83%
Clothing Industry—				
Caps	7	284	215	75.83%
Coats, suits and dresses	9	770	458	59.35%
Clothing, men's	27	2,807	1,695	60.84%
Garters, men's	2	94	90	95.74%
Neckwear	3	108	101	93.52%
Overalls	6	1,270	1,056	83.15%
Shirts	3	1,015	905	89.16%
Cordage and twine	3	216	149	68.98%
Distilleries	4	393	215	54.71%
Drugs and chemicals	2	127	61	48.03%
Dry cleaning and dyeing	8	200	106	53.00%
Electrical apparatus and supplies	3	1,395	183	13.12%
Film exchanges and developing	5	49	40	81.63%
Flags, banners and regalia	4	323	179	55.41%
Food Products—				
Bread and crackers	6	732	287	39.21%
Canning and preserving	3	117	90	76.92%
Candy	14	956	726	75.94%
Creameries	2	91	23	25.27%
Coffee and spices	4	252	149	59.12%
Flavoring extracts	2	28	16	57.14%
Macaroni and spaghetti	2	75	21	28.00%
Meat packing	4	882	76	8.62%
Foundry and machine shop products	2	1,200	26	2.17%
Glassware and pottery	5	1,470	199	13.54%
Knitting	2	198	160	80.80%
Laundries	12	1,135	986	85.29%
Mattresses, bedding and bed springs	6	485	189	38.97%
Millinery	5	351	320	91.16%
Paper goods, envelopes and boxes	19	2,475	611	24.69%
Printing and publishing	14	3,321	1,486	44.75%
Rubber and specialties	2	149	15	10.17%
Rag sorting	4	225	100	44.44%
Shoes (women's)	19	4,824	2,509	52.01%
Soap and by-products	9	2,546	665	26.12%
Tin products	5	1,131	284	25.11%
Miscellaneous	15	4,492	808	17.98%
	275	40,651	16,924	

TABLE VIII.

LARGEST WOMEN-EMPLOYING INDUSTRIES CLASSIFIED ACCORDING TO NUMBER AND PER CENT OF WOMEN IN EACH

Industry --	No. Plants.	All Workers	No. Women	Per Cent Women
Shoes (women's)	19	4,824	2,509	52.01%
Clothing (men's)	27	2,807	1,695	60.84%
Printing and publishing	14	3,321	1,486	44.75%
Cigars and tobacco	13	1,766	1,159	65.63%
Overalls	6	1,270	1,056	83.15%
Laundries	12	1,133	986	85.29%
Shirts	3	1,015	905	89.16%
Candy	14	956	726	75.94%
Soap and by-products	9	2,546	665	26.12%
Paper products	19	2,475	611	24.69%
Coats, suits and dresses	6	1,419	354	24.95%
Auto parts	9	770	458	59.35%
Millinery	5	351	320	91.16%
Bread and crackers	6	732	287	39.21%
Tin products	6	1,131	284	25.11%
		26,588	13,544	

OHIO LABOR LAWS

Section 1028-1. **(FIRE EXITS.)** The owners of buildings wherein shops or factories are operated shall make suitable provisions for the safe and speedy egress therefrom in case of fire or other disaster of persons employed in such shop or factory or residing therein or who may be invited any time therein as follows:

1. They shall provide on each floor on which a shop or factory is operated, doors or other means of egress therefrom to such fire escapes or inside stairways, which said doors or other means of egress must swing outward and toward the natural means of egress, and if capable of being locked or latched, the same must be operated from the inside.

2. They shall provide signs over all doors or exits and over all openings or passageways leading to exits which shall be clearly marked with the word "EXIT" in plain black letters not less than six inches high; such signs shall be so placed that they may be seen from any part of the room if possible.

Section 6330-2. **(ESPECIALLY DANGEROUS WORK OR PROCESSES.)** Every work or process in the manufacture of white lead, red lead, litharge, sugar of lead, arsenate of lead, lead chromate, lead sulphate, lead nitrate or fluo-silicate, is hereby declared to be especially dangerous

to the health of the employes, who, while engaged in such work or process, are exposed to lead dusts, lead fumes or lead solutions.

Section 6330-3. **(DUTIES OF EMPLOYERS TO PROVIDE SAFETY APPLIANCES FOR THE PROTECTION OF EMPLOYES IN ESPECIALLY DANGEROUS WORKS OR PROCESSES.)** (b) Washing facilities. The employer shall provide a wash room or rooms which shall be separate from the work rooms, be kept clean, and be equipped with:

1. Lavatory basins fitted with waste pipes, and two spigots conveying hot and cold water, or
2. Basins placed in troughs fitted with waste pipes, and for each basin two spigots conveying hot and cold water, or
3. Troughs of enamel or similar smooth impervious material fitted with waste pipes, and for every two feet of trough length two spigots conveying hot and cold water.

Where basins are provided there shall be at least one basin for every five employes and where troughs are provided, at least two feet for every five such employes. The employer shall also furnish nail brushes and soap, and shall provide at least three clean towels per week for each such employe. A time allowance of not less than ten minutes, at the employer's expense, shall be made to each such employe for the use of said wash room before the lunch hour and at the close of the day's work.

Section 1008. **(SEATS, LUNCH ROOMS AND HOURS OF LABOR.)** Every person, partnership or corporation employing females in any factory, workshop, business office, telephone or telegraph office, restaurant, bakery, millinery or dressmaking establishment, mercantile or other establishments, shall provide a suitable seat for the use of each female so employed and shall permit the use of such seats when such female employes are not necessarily engaged in the active duties for which they are employed, such seat to be constructed, where practicable, with an automatic back support and so adjusted as to be a fixture but not obstruct employes in the performance of duty, *and shall further provide a suitable lunch room, separate and apart from the work room*, and in establishments where lunch rooms are provided, female employes shall be entitled to no less than thirty minutes for meal time; provided, that in any establishment aforesaid in which it is found impracticable to provide a suitable lunch room, as aforesaid, female employes shall be entitled to no less than one hour for meal time, during which hour they shall be permitted to leave the establishment. Females over eighteen years of age shall not be employed or permitted or suffered to work in or in connection with any factory, workshop, telephone or telegraph office, millinery or dressmaking establishment, restaurant or in the distribution or transmission of messages or in any mercantile establishment located in any *city*, more than nine hours in any one day, except Saturday, when the hours of labor in mercantile establishments may be *ten* hours, or more than six days, or more than fifty hours in any one week, but meal time shall not be included as a part of the work hours of the week or day, provided, however, that no restriction as to hours of labor shall apply to *canneries* or establishments engaged in preparing for use perishable goods, *during the season* they are engaged in canning their products.

Section 1009. **(WATER CLOSETS AND DRESSING ROOMS.)** The owner or person having charge of the building wherein any female is employed shall provide in each establishment on the same floor or on the floor immediately above or immediately below the floor where such employe works, suitable and separate *toilet and dressing rooms* and *water closets*, properly ventilated, for the exclusive use of such employes. Such toilets and dressing rooms and water closets shall be situated together, with one water closet for every twenty-five females or less, and where there are more than twenty-five females employed, additional water closets shall be provided in the same ratio. No toilet or dressing rooms or water closets shall be placed in the basement or cellar unless females are actually and regularly employed therein, and unless such basement or cellar is properly ventilated.

Section 1020. **(SWEAT SHOPS, ROOMS USED FOR THE MANUFACTURE OF WEARING APPAREL OR TOBACCO GOODS.)** No dwelling or building or room or apartment thereof in or connected with a tenement, dwelling or other building shall be used except by the immediate members of the family living therein, for carrying on any process of making wearing apparel or goods for wear, use or adornment, or for manufacturing cigars, cigarettes or tobacco goods in any form, if such wearing apparel or other goods are to be exposed for sale or sold by a manufacturer, wholesaler or jobber or by a retailer, unless such room or apartment is made to conform to the requirements and regulations herein provided.

Section 1021. **(ENTRANCES REQUIRED FOR SUCH ROOM.)** Each room or apartment used for the purposes named in the preceding section, except by the immediate members of the family living therein, shall be regarded as a shop or factory and shall be separate from and have no door, window or other opening into a living or sleeping room of a tenement or dwelling. No such shop or factory shall be used for living or sleeping purposes or contain any bed, bedding or cooking utensils except those required to carry on the work therein. Each such shop or factory shall have a direct entrance from the outside, and if above the first floor, shall have a separate and distinct stairway leading thereto, and be well and sufficiently lighted, heated and ventilated.

Section 12994. **(EMPLOYING MINORS.)** No boy under 16 years of age and no girl under 18 years of age shall be employed or permitted to work in or in connection with the establishments mentioned in Section 1203 of the General Code, or in the distribution or transmission of merchandise or messages unless such employer first procures from the proper authority *the age and schooling certificate required by law.*

Section 1206. *No boy under the age of sixteen and no girl under the age of eighteen years* shall be employed, permitted or suffered to work in, about or in connection with any establishment or occupation named in Section 1203 (1) for more than six days in any one week, (2) or more than forty-eight hours in any week, (3) nor more than *eight hours* in any one day, (4) or before the hour of seven o'clock in the morning or after the hour of six o'clock in the evening.

Section 13005. No female under the age of 21 years shall be engaged or permitted to work at an employment which compels her to remain standing constantly while on duty.

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